ABSTRACT:

The invention relates to an X-ray detector module (1) in which a preferably metallic carrier (3) forms tubular cells (4) in which there is provided a mixture of a binder (7) and scintillator particles (6). The absorption of X-rays by the scintillator particles (6) gives rise to the emission of light of a longer wavelength (λ_1, λ_2) that can be detected by a detector (5) arranged at the far end of the cells (4). In order to keep the light yield as high as possible, a difference of less than 20% is pursued between the refractive indices of the binder (7) and the scintillator particles (6) and/or nano-crystalline scintillator particles (6) of a size of between 1 and 100 nm are used. Preferably, the cell walls (3, 3') are extended in the direction of incidence of the X-rays in order to form an anti-scatter grid above the detector.

(Figure).